

# Information Technology Capital Investment Program

## Project Status Report

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To: Information Technology Strategy and Investment Committee  
John Vittner, Office of Policy and Management

From: Steve McConaughy - Depart

Email: Stephen.Mcconaughey@ct.gc

Agency: Department of Public Health

Project: Immunization Information Sy

Project Manager: Nancy Sharova

Reporting Period: Project Inception through 12/

Total Funds Requested: \$300,000

Total Funds Allotted to Agency: \$300,000

Accumulative Total Capital Fund Expenditures to Date: \$126,101

### Brief Project Description/Summary:

To Convert the current CTCIRTS Immunization Registry to a new Off Site SaaS service model installation.

The project will implement the functionality of the newly modernized Immunization Information System (IIS) to meet public health reporting requirements for Meaningful Use (MU) Stage 3, which supports healthcare providers to ensure that electronic health records (EHR) are connected to the IIS in a manner that provides for direct bidirectional electronic exchange of immunization data to improve the quality of care for Connecticut Citizens, to expand the IIS to a lifetime registry while ensuring the quality of the information contained therein. The new IIS is called CT WiZ. This will link with the State Health Information Exchange (HIE), once available.

### Summary of Progress Achieved to Date:

#### 1/15/2021 (covering July through December 2020)

- CT WiZ, the Immunization Information System, had five enhancements from July to December 2020.
- Clinic access has been divided into two types of users, those sending their electronic health records (EHR) through the HL7 interface and those directly entering patient information into CT WiZ.
  - There are 153 clinics using EHR.
  - There are 95 clinics entering records through direct entry.
  - Of those clinics, 138 are also ordering vaccine through CT WiZ.
  - There are an additional 299 clinics in the process of onboarding to submit vaccinations from their EHR.
  - All remaining CVP Providers had been contacted to onboard to CT WiZ.
  - The August, October and December CVP Update promoted live webinar trainings and onboarding with CT

## WiZ.

- There are 646 school nurses with read-only access to CT WiZ.
- Onboarded began in May and was completed in September 2020 for the Refugee Immunization Information Systems Exchange (RIISE).
- With preparation for the coming influenza season, the need to assure the vaccination of adults, and preparation for a COVID-19 vaccine, we have advanced our timetable for adult provider and pharmacy onboarding into CT WiZ.
  - There are 286 pharmacies onboarded in CT WiZ as of December 2020.
- For clinics using CT WiZ, 2,863,333 immunization records have been created with 18% of records for those over 18 years of age.
- Bi-directional exchange:
  - As clinics move through each phase (Registration, Testing and Production Go-Live), clinics receive an email from DPH they can use for Meaningful Use (MU)/Promoting Interoperability attestation, if applicable.
  - The bidirectional (query/response) exchange procedures are posted on the CT WiZ webpage and 19 clinics were actively utilizing bidirectional exchange in December 2020.
- Link to Health Information Exchange: DPH IIS team continue to attend the Health IT Council (HIT) Meetings.
- The HITECH IAPD-U for the fiscal 2021 is currently in the approval process. The MOA has been updated.
- Training has been provided both on the CT Immunization webpages as well as through live online webinar for those clinics about to go live with CT WiZ for ordering vaccine.
  - There were 177 Clinics trained on CT WiZ as of December 2020.
- CT WiZ passed AART and was validated for Transport, Submission and Acknowledgment, and Query and Response Assessments in May 2020 and continues to meet national standards in the IIS.
- Updated our Helpdesk application to a new portal in July with additional topics.
- Developed HL7 application form as in-house development for clinics to register using a web application and created HL7 training tools in CT WiZ posted on our website in June 2020 and continued to utilize for onboarding through December 2020.
- Immunization Program purchased mobile units that interface with CT WiZ and assisted local health departments in conducting mass vaccination influenza clinics in September 2020.
- Immunization Program staff are a part of national workgroups on the ability to exchange immunization information between states (IZ Gateway) as well as those developing the CDC Vaccine Administration Management System (VAMS) for COVID-19 vaccine response and went live with VAMS as a hybrid with VAMS and CT WiZ in December 2020.
- CT was selected by the American Immunization Registry Association (AIRA) and presented “Data Quality You Can Plan On” in August 18<sup>th</sup> Webinar Series to Virtually Advance IIS Together.
- 11/2020 – Reviewed Reminder/Recall Report enhancements in CT WiZ with Envision.
- 9/2/20 – Meaningful Use/Promoting Interoperability Letter signed by DSS/DPH and posted on DPH website

## 7/9/2020 Update (covering January through June 2020)

- CT WiZ, the Immunization Information System, had five enhancements since January 2020.
- Clinic access has been divided into two types of users, those sending their electronic health records (EHR) through the HL7 interface and those directly entering patient information into CT WiZ.
  - There are 87 clinics using EHR.
  - There are 82 clinic entering records through direct entry.

- Of those clinics, 169 are also ordering vaccine through CT WiZ.
- There are an additional 370 clinics in the process of onboarding to submit vaccinations from their EHR.
- All remaining CVP Providers had been contacted to onboard to CT WiZ.
- The April and July CVP Update promoted live webinar trainings and onboarding with CT WiZ.
- There are 606 school nurses with read-only access to CT WiZ.
- Onboarding began in May for the Refugee Immunization Information Systems Exchange (RIISE).
- With preparation for the coming influenza season, the need to assure the vaccination of adults, and preparation for a COVID-19 vaccine, we have advanced our timetable for adult provider and pharmacy onboarding into CT WiZ.
  - There are 434 pharmacies onboarding in CT WiZ as of June 2020.
- For clinics using CT WiZ, 1,089,326 immunization records have been created with 26% of records for those over 18 years of age.
- Bi-directional exchange:
  - As clinics move through each phase (Registration, Testing and Production Go-Live), clinics receive an email from DPH they can use for Meaningful Use (MU)/Promoting Interoperability attestation, if applicable.
  - The bidirectional (query/response) exchange procedures were finalized in this reporting period and added to the CT WiZ webpage.
- Link to Health Information Exchange: DPH IIS team continue to attend the Health IT Council (HIT) Meetings.
- The HITECH IAPD-U for the fiscal 2021 is currently in the approval process.
- Training has been provided both on the CT Immunization webpages as well as through live online webinar for those clinics about to go live with CT WiZ for ordering vaccine.
  - There were 147 Clinics trained on CT WiZ as of June 2020.
- CT WiZ passed AART and was validated for Transport, Submission and Acknowledgment, and Query and Response Assessments in May 2020.
- Updated our Helpdesk application to a new portal to allow for availability from telework in June.
- Developed HL7 application form as in-house development for clinics to register using a web application and created HL7 training tools in CT WiZ posted on our website in June 2020.
- Immunization Program purchased mobile units that interface with CT WiZ to allow for use at mass vaccination clinics.
- Immunization Program staff are a part of national workgroups on the ability to exchange immunization information between states (IZ Gateway) as well as those developing the CDC Vaccine Administration Management System (VAMS) for COVID-19 vaccine response for Tier 1 and 2 immunization pods.
- CT was selected by the American Immunization Registry Association (AIRA) to present “Data Quality You Can Plan On” in August 18<sup>th</sup> Webinar Series to Virtually Advance IIS Together.
- CT presented on User Acceptance Testing to IIS Learning Community on 6/15/20.
- COVID-19 pandemic, leaving children and communities at risk for outbreaks of vaccine-preventable diseases. In response, the CT DPH Immunization Program has supported providers to remind parents that vaccinations are safe and important through activities including:
  - 01/2020 - 5/2020 – Reviewed CT Vaccine Program (CVP) ordering trends monthly.
  - 4/2020 – Surveyed providers to see if they can catch children up to for school requirements.
  - 5/7/2020 – Promoted letter encouraging providers to onboard with CT WiZ as a strategy for real-time reporting and utilizing reminder recall reports.
  - 05/2020 - 06/2020 – Promoted repository of resources and social media toolkits to providers and local Immunization Action Plan (IAP) Contractors to utilize CT WiZ to catch up children during pandemic.
  - 6/2020 – Promoted and posted updated Reminder/Recall Reports training on CT WiZ Training website.

### **Progress on Milestones**

**July - December 2020**

July - December 2020

Objective: Onboard Eligible Providers (EPs) with Electronic Health Records (EHRs) attesting to Meaningful Use/Promoting Interoperability Stage 3 for electronic data exchange with the IIS.

Milestone5: Increase EPs with EHRs that pass into production phase of onboarding process.

Target: 70

Objective: Ensure immunization administration data is submitted to the IIS through electronic data exchange to ensure more timely and complete records.

Milestone: Increase EPs on-going electronic reporting in IIS production environment.

Target: 70%

Objective: Ensure EPs have access to order vaccines, manage inventory and generate reports in the IIS.

Milestone: Increase EPs trained on IIS functionality for vaccine inventory and reports.

Target: 70%

January – June 2020

Objective: Enhance IIS to meet national functional standards to ensure updates/releases are implemented to support bi-directional data exchange.

Milestone: Enhancement releases from the IIS vendor are tested, approved by CT and implemented

Target: Monthly Release Schedule

Progress: CT WiZ passed AART and was validated for Transport, Submission and Acknowledgment, and Query and Response Assessments in May 2020. CT WiZ has tested, approved, and implemented every enhancement release from the IIS vendor.

Objective: Onboard Eligible Providers (EPs) with Electronic Health Records (EHRs) attesting to Meaningful Use/Promoting Interoperability Stage 3 for electronic data exchange with the IIS.

Milestone: Increase EPs with EHRs that pass into production phase of onboarding process.

Target: 40%

Progress:

Objective: Ensure immunization administration data is submitted to the IIS through electronic data exchange to ensure more timely and complete records.

Milestone: Increase EPs on-going electronic reporting in IIS production environment.

Target: 40%

Progress:

Objective: Ensure EPs have access to order vaccines, manage inventory and generate reports in the IIS.

Milestone: Increase EPs trained on IIS functionality for vaccine inventory and reports.

Target: 50

Progress:

We will continue with the Milestones listed below for the rest of the project.

**Update on the Business Goals:****July - December 2020**

-Onboard 90% of EP attesting to MU Stage 3. There are currently 630 pediatric physician sites in the Vaccine program.

**There are (24%) 153 providers onboarded in CT WiZ with EHR electronic exchange.**

-Increase to 90% the providers accessing the IIS user interface (UI); so, providers will have access to order vaccines and generate timely reports to improve vaccination rates.

**There are (15%) 95 providers accessing the UI to order vaccines/generate reports.**

-Receive 90% of immunization administration data through electronic data exchange

**There are (39%) 248 providers submitting immunizations administration data electronically.**

-Expand the age range for patients' immunizations administered.

**The age range** captured has been expanded to cover all ages. CT WiZ is now onboarding adult **vaccinating providers including** pharmacies.

-IIS receives more timely and more complete immunization data, to improve population and public health.

**Ramp up of onboarding increased access to real-time and complete data for providers and public health.**

-Establish bidirectional exchange with EHR vendors and providers.

**Bidirectional exchange is possible with all EHR providers and the guide has been posted on our website.**

-Automate data interfaces with other information systems at DPH, such as Vital Records (birth, death, adoption, paternity).

**Vital Records data is automated with CT WiZ. An electronic death registry went live in October 2020.**

-Link to other state information systems (such as the Department of Social Services, Health Information Exchange)

**We were exploring an interface with DSS, but the COVID-19 pandemic has affected our priorities, moving forward the timetable to enroll and onboard adult providers to prepare for the distribution of a COVID-19 vaccine.** We are still exploring the interface with DSS. We will also work with the Health Information Exchange when it is available.

**January - June 2020**

-Onboard 90% of EP attesting to MU Stage 3. There are currently 630 pediatric physician sites in the Vaccine program.

**There are (14%) 87 providers onboarded in CT WiZ with EHR electronic exchange.**

-Increase to 90% the providers accessing the IIS user interface (UI); so, providers will have access to order vaccines and generate timely reports to improve vaccination rates.

**There are (13%) 82 providers accessing the UI to order vaccines/generate reports.**

-Receive 90% of immunization administration data through electronic data exchange

**There are (27%) 169 providers submitting immunizations administration data electronically.**

-Expand the age range for patients' immunizations administered.

**The age range** captured has been expanded to cover all ages. CT WiZ is now onboarding adult **vaccinating** providers **including** pharmacies.

-IIS receives more timely and more complete immunization data, to improve population and public health.

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-Link to other state information systems (such as the Department of Social Services, Health Information Exchange)

**We were exploring an interface with DSS, but the COVID-19 pandemic has affected our priorities, moving forward the timetable to enroll and onboard adult providers to prepare for the distribution of a COVID-19 vaccine.** We are still exploring the interface with DSS. We will also work with the Health Information Exchange when it is available.

**12/6/2019 Update** (covering July to December 2019)

- CT WiZ, the Immunization Information System, had four enhancements since July 2019.
- The Childhood Vaccine Program database has been cleaned, reducing the number of CVP participants to 649 clinics as of 11/24/19.
- Clinic access has been divided into two types of users, those sending their electronic health records (EHR) through the HL7 interface and those directly entering patient information into CT WiZ.
  - There are 22 clinics using EHR.
  - There are 59 clinic entering records through direct entry.
  - Of those clinics, 66 are also ordering vaccine through CT WiZ.
  - There are an additional 215 clinics in the process of onboarding to submit vaccinations from their EHR.
  - Immunization staff have been actively recruiting CVP clinics to onboard.

- The July CVP Update promoted onboarding.
- There are 551 school nurses with limited access to CT WiZ.
- For clinics using CT WiZ, historical immunization records are being uploaded. Thus far, 372,501 legacy records have been uploaded.
- We have onboarded thirteen EHR vendors and are working with an additional seven vendors.
- Bi-directional exchange:
  - As clinics move through each phase (Registration, Testing and Production Go-Live), clinics receive an email from DPH they can use for Meaningful Use (MU) attestation, if applicable.
  - The bidirectional (query/response) exchange procedures were being finalized in this reporting period and will be added to the CT WiZ webpage in the next reporting period.
- Link to Health Information Exchange: DPH IIS team continues to attend the Health IT Advisory Council Meetings.
- The HITECH IAPD-U was approved 8/30/19.
- Training has been provided both on the CT Immunization webpages as well as through live online meeting for those clinics about to go live with CT WiZ for ordering vaccine.
  - The standard operating procedures and slides for clinic trainings were updated in September.
- Two presentation on onboarding and IIS Migration were presented at the AIRA National Meeting in August. One of these was again presented to the national IIS learning community in October.
- **Immunization Program Milestones**
- January – June 2020

Objective: Enhance IIS to meet national functional standards to ensure updates/releases are implemented to support bi-directional data exchange.

Milestone: Enhancement releases from the IIS vendor are tested, approved by CT and implemented

Target: Monthly Release Schedule

Objective: Onboard Eligible Providers (EPs) with Electronic Health Records (EHRs) attesting to Meaningful Use/Promoting Interoperability Stage 3 for electronic data exchange with the IIS.

Milestone: Increase EPs with EHRs that pass into production phase of onboarding process.

Target: 40%

Objective: Ensure immunization administration data is submitted to the IIS through electronic data exchange to ensure more timely and complete records.

Milestone: Increase EPs on-going electronic reporting in IIS production environment.

Target: 40%

Objective: Ensure EPs have access to order vaccines, manage inventory and generate reports in the IIS.

Milestone: Increase EPs trained on IIS functionality for vaccine inventory and reports.

Target: 50%

#### July – December 2020

- Objective: Onboard Eligible Providers (EPs) with Electronic Health Records (EHRs) attesting to Meaningful Use/Promoting Interoperability Stage 3 for electronic data exchange with the IIS.
- Milestone: Increase EPs with EHRs that pass into production phase of onboarding process.
- Target: 70
- Objective: Ensure immunization administration data is submitted to the IIS through electronic data exchange to ensure more timely and complete records.
- Milestone: Increase EPs on-going electronic reporting in IIS production environment.
- Target: 70%
- Objective: Ensure EPs have access to order vaccines, manage inventory and generate reports in the IIS.
- Milestone: Increase EPs trained on IIS functionality for vaccine inventory and reports.
- Target: 70%

#### January – June 2021

- Objective: Onboard Eligible Providers (EPs) with Electronic Health Records (EHRs) attesting to Meaningful Use/Promoting Interoperability Stage 3 for electronic data exchange with the IIS.
- Milestone: Increase EPs with EHRs that pass into production phase of onboarding process

Milestone: Increase EPs with EPs that pass into production phase of onboarding process.

Target: 90%

Objective: Ensure immunization administration data is submitted to the IIS through electronic data exchange to ensure more timely and complete records.

Milestone: Increase EPs on-going electronic reporting in IIS production environment.

Target: 90%

Objective: Ensure EPs have access to order vaccines, manage inventory and generate reports in the IIS.

Milestone: Increase EPs trained on IIS functionality for vaccine inventory and reports.

Target: 90%

Objective: Develop standard operating procedures for linkage with the CT Department of Social Services (DSS) information systems to enroll and update patients enrolled in Medicaid into the IIS.

Milestone: Establish a linkage with the CT HIE.

Target: linkage established

Objective: Develop standard operating procedures for EPs to access the CT Health Information Exchange (HIE) for electronic data exchange with the IIS.

Milestone: Establish a linkage with the CT DSS.

Target: linkage established

#### July – September 2021

Objective: Expand age range in the regulations to enable IIS to capture of patients' immunization records up through age 18 through electronic reporting.

Milestone: Regulations amendment approved.

Target: age range increased There continue to be regular upgrades to make the new IIS functional to meet the required national standards.

- The development phase of the IIS will be considered completed when 90% of VFC providers have been onboarded, as stated in our goals.
- Capital IT funds have been encumbered, but not yet spent. The HITECH 90/10 funding continues until 9/30/2021 and matching funds will be required through that time.

#### **07/2019 Update** (covering January to June 2019):

- The new Immunization Information System, called CT WiZ, Release 1.0 = 9/17/18, Release 1.1 = 10/16/18, Release 1.2 = 11/13/18.
  - Enhancements to CT WiZ went live during this period were:
    - Release 1.3 = 1/23/19
    - Release 2.0 = 4/16/19
    - Release 3.0 = 6/20/19
- Access to the IIS user interface by June 2019:
  - 8 UI Clinics (with 50 usernames) ordering vaccines in CT WiZ
  - 518 School Nurses online in CT WiZ
  - 55 DPH Immunization Program Staff and Immunization Action Plan Outreach Coordinators
- Bi-directional exchange:
  - 109 clinics were in the EHR onboarding process with CT WiZ (registration and testing phases) with 4 clinics reporting into Production CT WiZ.
  - As clinics move through each phase (Registration, Testing and Production Go-Live), clinics receive an email from DPH they can use for Meaningful Use (MU) attestation, if applicable.
  - The bidirectional (query/response) exchange procedures were being finalized in this reporting period and will be added to the CT WiZ webpage in the next reporting period.
- Link to Health Information Exchange: DPH IIS team continues to attend the Health IT Advisory Council Meetings.
- As Clinics are onboarding and being trained in the UI, real-time data is being reported to CT WiZ. Additionally, as part of the onboarding process, a legacy load of historical records were imported to help ensure a complete record. This legacy load process was tested in the QA environment and implemented in the production environment during this reporting period.
- An EHR Survey was sent through SurveyMonkey on 2/13/19 and closed on 5/1/19. This is being used for our outreach and management of the EHR onboarding queue.
- As Clinics are onboarded, they report immunizations administered on all their patients as entered in their EHR. Additionally, the CT DPH Immunization Program submitted proposed state regulations amendment to strike written

so all data will be reported in an electronic format. This moved forward and was sent to the Governor's office in July and will be reported on in the next update.

#### 6/1/2018 Update:

The new Immunization Information System is in the construction and beginning testing phase. Staff have received training on the IIS. The portion of the project that hnsi grant funds has not yet begun. The Implementation Advance Planning Document (IAPD) is funded through the Department of Social Security (DSS). Funding is awarded by the Centers for Medicare and Medicaid Services (CMS) who must also approves all agreements and contracts prior to implementation. Funding has been awarded.

The new IIS will go live in late September, which is on track to meet the project plan schedule. Costs will also be on budget.

DPH is on track for being able to retire and decommission all resources current ly used at BEST fir the CTCIRTS installation by 1/31/2019.

#### 01/2019 Update (covering June to December 2018):

- The new Immunization Information System, called CT WiZ, went live in September 2018.
- Enhancements to CT WiZ were made since the initial release 1.0 went live September 17, 2018:
  - Release 1.1 went live October 16, 2018
  - Release 1.2 went live November 13, 2018
  - Release 1.3 - DPH completed user acceptance testing and scheduled go live for January.
- Access to the IIS user interface by December 2018:
  - 386 Clinic Provider Users online
  - 459 School Nurses online
  - 69 DPH Immunization Program Staff and Immunization Action Plan Outreach Coordinators
- Bi-directional exchange: By December, 90 clinics were in the EHR onboarding process with CT WiZ (registration and testing phases.)
  - As clinics move through each phase (Registration, Testing and Production Go-Live), clinics receive an email from DPH they can use for Meaningful Use (MU) attestation, if applicable.
- Automate data interfaces with Vital Records:
  - As of September 2018, daily automated CT Vital Records (ConnVRS) interface with CT WiZ populates birth, death, adoption and record updates.
- Link to Health Information Exchange: DPH IIS team attends the Health IT Advisory Council Meetings and presented an update on CT WiZ in December, which was postponed to January
- Implementation Advance Planning Document (IAPD) funding was awarded by the Centers for Medicare and Medicaid Services (CMS). Before expending funds, the MOA with DSS had to be approved by CMS and it was signed by both Commissioners of DSS and DPH on August 27, 2018.



## Issues and Risks:

1/15/2021

COVID-19 have impacted the ability to onboard as another system has been required to be implemented to register employers and patients, order vaccines, and input vaccination data. With this other system, staff have been needed to train and address Help Desk questions regarding this system.

The number of providers that need to be onboarded as COVID-19 vaccination allocations increase is still quite large.

7/9/2020

- Some CVP providers are delaying onboarding to CT WiZ.
- The number of adult providers may overwhelm the staff's ability to onboard them as influenza season approaches.
- The need to have providers onboarded and ordering vaccine through CT WiZ prior to distribution of a COVID-19 vaccine as the federal government has said that COVID-19 vaccine will be ordered in the same manner other vaccines are ordered.

12/6/2019

- Training materials a updated to match CT WiZ since the enhancements.

7/12/2019

On 6/18/19, CT DSS sent a follow up letter to CMS on the status of the submission of the HITECH IAPD-U for review and approval by CMS from 1/31/19.

6/1/2018

- Current Build out and data migrtion appears to be on schedule.

- Training for in house adminstrators has been completed.

We are on target for a funtional "GoLive" of September 17. this will complet phase I. At this point wese no obsticalses to meeting this target.

Phase II Will consist of Onboarding 700+ exteranl immunization sites. this will involve coordinating training schedules and integrating external data connections that are not completely wthin the controll of DPH. Successful onboarding will be dependent on developing efficient workign relationships wiht our public sector clients

## Next Steps &amp; Project Milestones:

1/15/2021

Prioritize the onboarding of COVID-19 vaccinators to CT WiZ. Once onboard, other vaccines administered by these providers will also be sent to CT WiZ.

A public portal is planned. This will allow parents or guardians to access the official immunization record through two-factor authentication.

7/9/2020

- We are exploring creating an interface between CT WiZ and the DSS database.
- We are ramping up onboarding adult immunization providers including continuing to onboard pharmacies.
- A public portal is planned. This will allow parents or guardians to access the official immunization record through two-factor authentication.
- Training materials are regularly updated to reflect changes made in CT WiZ enhancements, including on the mobile units for mass vaccinations clinics.

12/6/2019

- We are exploring creating an interface between CT WiZ and the DSS database.
- Training materials need to be updated to match the changes that have been made in CT WiZ through the enhancements.
- A public portal is planned. This will allow parents or guardians to access the official immunization record through two-factor authentication.

July 12, 2019

CT WiZ enhancement and version upgrade releases are scheduled for Fall and Winter of 2019. CT WiZ is on track with the project plan.

Contractors will continue to be hired to conduct trainings on CT WiZ as the onboarding queue increases.

September 17, 2018 - Functional "GoLive" of the SaaS CTWIZ Immunization system. Convert current system to "Read Only" for reference.

October 1 2018 - Begin Onboarding Private Sector Immunization sites

- December 2018 - Decommission and return BEST resources used by the legacy CTCIRTS application